## **Claim**

1. An antioxidant of bamboo leaves (AOB), wherein the chemical structures of its representative components are:

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(IV)

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- 2. The antioxidant of bamboo leaves of Claim 1, wherein said antioxidant is a complex mixture with synergistic effects, the appearance of the antioxidant is yellow or brown-yellow powders or particles; wherein the main active ingredient of the antioxidant are flavones, lactones, and phenolic acids, and the representative compounds includes Orientin (I), Homoorientin (II), Vitexin (III), Isovitexin (IV), Hydrxyl-Coumarin (V), Chlorogenic acid (VII), Caffeic acid (VII), and Ferulic acid (VIII).
- 3. The antioxidant of bamboo leaves of Claim 2, wherein said antioxidant has  $\geq 30\%$  total flavones content when determined in aluminum nitrate-sodium nitrite colorimetry using rutin as reference; said antioxidant has  $\geq 15\%$  total lactones content when determined in isohydroximic acid colorimetry using aescine as reference; and said antioxidant has  $\geq 7.5\%$  phenolic acids content (total phenols total flavones) when determined in forint reagent reduction-colorimetry using p-hydroxybenzoic acid as reference.
- 4. The antioxidant of bamboo leaves of Claim 1, wherein the infrared chromatogram of said antioxidant which is tabletted with potassium bromide shows that, there are characteristic absorptions at or near 3400, 2935, 1626, 1080, and 616 cm<sup>-1</sup>; when said antioxidant is dissolved in spectrum-pure methanol, the ultraviolet chromatogram shows that, there are two main absorption peaks in the range of 240-400nm, including a strong absorption peak near 270nm, and a secondary strong absorption peak near 330nm.
- 5. A use of an Antioxidant of Bamboo Leaves as a natural, nutritional and multifunctional food additive in edible oil, oil-containing food, Chinese or Western meat products, aquatic products, fruit juice, milk products, soft drinks, brewed wine, condiments, puffed food, and cakes for the purpose of clearing away active free oxygen-radicals, lipid antioxidation, prolonging shelf life, decreasing the use level and residue of nitrate or nitrite colorants, antibacterial, bacteriostatic, keeping fresh, color-protecting, odor-removing, and taste-modifying, wherein the amount of addition of said antioxidant is in the range of 0.005-0.05% by weight.
- 6. A use of an Antioxidant of Bamboo Leaves as an additive for meat products to decrease the use level and residue of nitrate or nitrite, to inhibit formation of N-nitrosamine, to increase stability of monascus pigment, and/or to increase water-maintaining and moistening performance of meat products.
  - 7. The use of Claim 5 or Claim 6 wherein said Antioxidant of Bamboo Leaves is used

alone or in combination with other natural antioxidants, vitamins, metallic ion chelating agent, or surfactants.

- 8. The use of Claim 7 wherein said natural antioxidants include phospholipid and phytic acid, said vitamins include VE, VC, and their derivatives, said metallic ion chelating agents include EDTA and citric acid, and said surfactants include Span80 and Span40.
- 9. The use of Claim 5 or Claim 6 wherein said Antioxidant of Bamboo Leaves is used in the form of powder, aqueous solution, micro-emulsion, or micro-capsule.
- 10. The use of Claim 6 wherein the usage amount of said Antioxidant of Bamboo
  Leaves is 0.005-0.05% by weight of meat products, and said meat products comprises
  sausage, Chinese sausage, or preserved ham.